



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

APPLICATION FOR PERMIT
TO CONSTRUCT A RESERVOIR AND TO STORE FOR BENEFICIAL USE
WATERS OF THE STATE OF WASHINGTON

\$50.00 NON-REFUNDABLE MINIMUM STATUTORY FILING FEE REQUIRED WITH APPLICATION
(GRAY BOXES FOR OFFICE USE ONLY)

APPLICATION NUMBER R2-30435	W.R.I.A. 28	COUNTY Clark	PRIORITY DATE 8-31-07	TIME	ACCEPTED SC
APPLICANT'S NAME Washington Department of Fish and Wildlife--Shillapoo Wildlife Area Brian Calkins, Wildlife Area Manager			TELEPHONE NUMBER 360-906-6725		
DATE AND PLACE OF INCORPORATION, IF APPLICANT IS A CORPORATION					
ADDRESS (STREET) 2108 Grand Blvd.		(CITY) Vancouver	(STATE) WA	(ZIP CODE) 98661	
1. SOURCE, USE, AND CAPACITY OF RESERVOIR					
NAME OF PROPOSED RESERVOIR Shillapoo Lake					
NAME OF STREAM OR OTHER SOURCE FOR RESERVOIR SUPPLY Lake River			TRIBUTARY OF Columbia River		
USE(S) TO BE MADE OF IMPOUNDED WATER (IRRIGATION, POWER, FISH PROPOGATION, ETC.) Floodplain Wetland and Wildlife Habitat Management					
NUMBER OF ACRE FEET TO BE STORED AT MAXIMUM OPERATING LEVEL 1,200 acre-feet at Normal full pool; 2,300 acre-feet at operational full pool.			MONTHS OF YEAR DURING WHICH RESERVOIR IS TO BE FILLED Begin filling in October reaching maximum depth in February through June. Drawdown through summer for vegetation management purposes.		
NUMBER OF ACRES TO BE IRRIGATED, IF USED FOR IRRIGATION N/A					
TYPE AND CAPACITY OF DIVERSION WORKS IF WATER IS TO BE WITHDRAWN The type of diversion is two 5,000 gpm pumps that can draw via an inlet pipe (42") from Lake River or receive water from Lake River via gravity feed (preferred) through the inlet pipe. The diversion capacity is 17 cfs.					
2. LOCATION OF POINT OF DIVERSION OR WITHDRAWAL					
ON ACCOMPANYING PLATS OR MAPS, ACCURATELY MARK AND IDENTIFY EACH POINT OF DIVERSION. GIVE MEASURED DISTANCE AND BEARING, OR NORTH-SOUTH AND EAST-WEST DISTANCES FROM NEAREST SECTION CORNER.					
COMPLETE EITHER A OR B	A	THE RESERVOIR IS TO BE LOCATED IN THE CHANNEL OF (NAME OF STREAM)			
	B	THE RESERVOIR IS TO BE FILLED THROUGH A FEEDER CANAL (OR PIPELINE) HAVING ITS POINT OF DIVERSION (INTAKE) LOCATED AS FOLLOWS Lake River as described below.			
DISTANCE AND BEARING TO SECTION CORNER 510 feet west of SW corner Section 44, T2N, R1E.					
LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) Clark Co parcel #188457000		SECTION 51	TOWNSHIP N. 2N	RANGE (E. OR W.) W.M. 1E	COUNTY Clark
3. IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, COMPLETE THIS SECTION					
LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)			
4. LOCATION OF IMPOUNDING STRUCTURE					
IMPOUNDING STRUCTURE LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) Clark Co. parcels 183278000, 188457000, 188459000.		SECTION 30 & 31	TOWNSHIP N. 3, N	RANGE (E. OR W.) W.M. 1, E	
LEGAL SUBDIVISION OF LANDS IN WHICH THE SUBMERGED AREA IS TO BE LOCATED (THE OUTLINE OF THIS LAND IS TO BE SHOWN ON THE MAP TO ACCOMPANY THIS APPLICATION)					
Parcels noted above. Deeds and legal descriptions attached.					
DO YOU OWN THIS PROPERTY <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		IF NO, HAVE YOU SECURED FLOOD RIGHTS FOR LANDS TO BE INUNDATED <input type="checkbox"/> YES <input type="checkbox"/> NO			
5. CONSTRUCTION OF IMPOUNDING STRUCTURE					
HEIGHT OF DAM (FEET) Maximum height 10 feet (varies with topography)	LENGTH OF TOP (FEET) 14,500 feet	LENGTH OF BOTTOM (FEET) 14,500 Feet	WIDTH ON TOP (FEET) 10 feet		

CONTINUED ON NEXT PAGE

SLOPE OF FRONT OR WATER SIDE (NUMBER OF FEET HORIZONTAL TO ONE FOOT VERTICAL) 3 H: 1V El 10 to 6; 6 H to 1 V below El 6		SLOPE OF BACK SIDE (NUMBER OF FEET HORIZONTAL TO ONE FOOT VERTICAL) 3 H: 1V El 10 to 6; 6 H to 1 V below El 6	
HEIGHT OF DAM ABOVE WATER LINE AT MAXIMUM FLOOD FLOW (FEET) These levees are below the level of the surrounding flood control levees. The proposed levee tops are at elevation 10, spillways are at elevation 9, and normal operation level is a maximum of elevation 8.			
TYPE OF CONSTRUCTION OF DAM AND MATERIAL OF WHICH IT IS TO BE BUILT Small earthen levees built of native soil (homogenous native earthfill, clay with silt).			
LOCATION AND DIMENSIONS OF SPILLWAYS (STATE WHETHER OVER, AROUND, OR THROUGH DAM) Spillways are 48 feet wide and are over the dam located at the west central portion of the project where an upgraded pumping station is to be located.			
NUMBER OF ACRES TO BE SUBMERGED BY RESERVOIR WHEN FULL 462		MAXIMUM DEPTH (FEET) 5 feet under normal conditions except at drainage sump below the toe of the levee where the depth would be 11 feet.	APPROXIMATE AVERAGE DEPTH (FEET) ~3 feet
ESTIMATED COST OF PROPOSED WORK \$2,000,000			
CONSTRUCTION WILL BEGIN ON OR BEFORE (DATE) June 2008 or sooner if approvals are in place and conditions are conducive.		CONSTRUCTION WILL BE COMPLETED ON OR BEFORE (DATE) October 2009	
SIZE AND TYPE OF OUTLET STRUCTURE 36" CMP up and downstream from concrete wall in rectangular box with 2' 6" stoplogs to adjust water levels. These will discharge to pump pit where water will either gravity flow through flood control levee (preferred) or be pumped through same. Two 5,000 gpm pumps plus the diking district's existing 10,000 gpm pump will be at this location. The two 5,000 gpm pumps discharge water to Lake River via an 18 inch pipeline; The diking district 10,000 gpm pump discharges to Lake River via a separate 18 inch discharge pipe. A 42-inch tidegated culvert also provides for gravity discharge to Lake River.			

6.

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED (IF DIFFERENT THAN ABOVE)	
COPY LEGAL DESCRIPTION FROM DEED: <u>OR ATTACH COPY OF DEED.</u> TAX STATEMENT DESCRIPTIONS ARE NOT ACCEPTABLE. <u>ALSO OUTLINE THIS PROPERTY ON THE MAPS OR PLATS SUBMITTED WITH THIS APPLICATION.</u>	
Deeds attached.	
DO YOU OWN THIS PROPERTY <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
IF NO, GIVE NAME AND ADDRESS OF OWNER	

Brian M. Calhoun
W. Wallace Area Manager
SIGNATURE OF APPLICANT

STATE OF WASHINGTON }
DEPARTMENT OF ECOLOGY } ss.

This is to certify that I have examined the foregoing application together with the accompanying maps and data, and return the same for correction or completion as follows:.....
.....
.....

In order to retain its priority, this application must be returned to the Department of Ecology, with corrections, on or before, 20.....

Witness my hand this day of, 20.....

.....
Department of Ecology

If you require this document in an alternate format, please contact the Water Resource Program at (360) 407-6600 or TTY (for the speech or hearing impaired) at 711 or 1-800-833-6388.